

Notice of Allowability

Application No.

09/934,085

Examiner

Jennifer A. Leung

Applicant(s)

SCHUTTE ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment/response filed on June 19, 2007 and July 16, 2007.
2. ☒ The allowed claim(s) is/are 1,3-5,7-17,19-21,23-33,35 and 36.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Weilacher on September 25, 2007.

The application has been amended as follows:

CLAIM 2 is cancelled.

CLAIM 1 (currently amended) A process for carrying out a reaction between at least two fluid reactants in a reactor having a plurality of wall elements, each of the wall elements comprising a plurality of tubular cavities being parallel to each other for conducting a fluid heat-exchange medium there through and a plurality of slot-shaped reaction spaces,

a) each of said slot-shaped reaction spaces is formed by the lateral surfaces of two spaced apart, substantially equally large and substantially right-parallelepipedal wall elements made of solid plates and wherein the wall elements are arranged interchangeably in a block within a virtual right parallelepiped, comprising

b) introducing the reactants into the slot-shaped reaction spaces from edge regions situated on the same side of the block and conducting said reactants through the reaction spaces as a reaction mixture in the same directions in parallel flows, and

c) conducting the fluid heat-exchange medium through the tubular cavities,

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extending in the interior of the wall elements to thereby obtain a desired reaction, and
d) supplying at least one reactant through the wall elements and into the reaction
space through at least one of the lateral surfaces of the wall elements,

wherein the slot-shaped reaction spaces have a slot width of between 0.05 and 5 mm,
whereby in case of explosive reaction mixtures the slot width of the slot-shaped reaction
spaces is chosen sufficiently small in order to avoid spreading of flames.

The following is an examiner's statement of reasons for allowance:

Claims 17, 19-21, 23-33, 35 and 36 are allowable. The prior art does not disclose or adequately suggest the instantly claimed apparatus for carrying out a reaction comprising the claimed combination of features, wherein, in particular, the plurality of slot-shaped reaction spaces are formed by the lateral surfaces of two spaced apart, substantially equally large and substantially right-parallelepipedal wall element made of solid plates, and each wall element comprises at least one feed channel that leads into the reaction space through at least one of the lateral surfaces of the wall element.

Claims 1, 3-5 and 7-16, previously withdrawn from consideration as a result of a restriction requirement, require all the limitations of allowable claim 17. Pursuant to the procedures set forth in MPEP § 821.04(a), the restriction requirement between inventions I and II, as set forth in the Office action mailed on September 27, 2004, is hereby withdrawn and claims 1, 3-5 and 7-16 are hereby rejoined and fully examined for patentability under 37 CFR 1.104. In view of the withdrawal of the restriction requirement, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all

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the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jennifer A. Leung
September 25, 2007


Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700